I am an extra class FCC amateur radio licensee, currently holding the callsign W1QA. I have also held equivalent licenses in The Netherlands and New Zealand, and reciprocal license in a number of other countries as well.

I am the previous founder and owner of a regional ISP (Internet Service Provider) and familiar with the technical and business operations of an Internet connectivity based business. I currently am employed in the broadcast industry.

In following the BPL issues since the FCC's initial NOI in April, 2003 I have been continuously concerned regarding the issue of utilization of frequencies by BPL that have primary allocations in numerous other services including those allocated to Amateur Radio operators, which are allocated on a world wide basis.

The President's recent speech (26 Apr 2004) in support of universal high speed Internet by 2007, especially through the adoption of BPL, has motivated me to file comments on NRPM 04-37.

Although the industry supporting the licensing and rollout of BPL refutes any issues that may exist, worldwide experience has shown that BPL implementations have been the source of harmful interference to high frequency (HF) communications.

In many areas power utilities have found BPL technologies to be less than satisfactory at producing an effective business models (sufficient customers to support the cost of the infrastructure). And in other areas licensing authorities (akin to the FCC) have opted against allowing the deployment of BPL due to interference to other services allocated to the frequency spectrum utilized by BPL.

Everyone would agree that newer broadband technologies and standards would be welcome - but not at the expense of the existing users of the HF frequency spectrum. This not only includes frequencies assigned to licensed Amateur Radio operators on a world wide basis but also those frequencies used by numerous emergency services including police, fire, etc. here in the United States.

It would appear that the current administration as well as the FCC has taken a position in support of BPL technology without adequate regard to other existing (incumbent) users of the spectrum. To wit, the comments in FCC 03-100 of Chairman Powell and Commissioners Qbernathy, Copps, Martin and Adelstein all are in favour of the licensing and prompt deployment of this technology.

Commissioner Martin indicated, "Several companies have told me they can deploy BPL technology under our existing rules." But feedback from numerous trials seems to indicate

that there can be noticeable interference on HF frequencies where BPL is being tested. What troubles me in some of these test situations is that if no interference reports are noted it is then assumed that there are no problems with the BPL technology. Or is it no problems until a licensed Amateur operator drives through (mobile operations) or moves into an area with a BPL enabled power plant?

In drawing a comparison, cable (TV) system operators must ensure that their systems do not radiate energy from their plants, especially on frequencies assigned to the aeronautical service. BPL licensees should be held to similar restrictions, ensuring that radiation limits over the entire HF spectrum and footprint of their plant stay within (under) FCC imposed limits. To ensure this the FCC should require routine proof of performance and tests of BPL plants - versus relying on complaints from the general public.

In the BPL trials, how would the BPL licensee today account for interference to services where the affected individuals are not even aware of what the interference may be or who to contact? For example - someone who may have a short wave radio and listens to broadcasts on any HF frequency may find some parts of the spectrum no longer useful, especially for reception of weak signals, due to BPL radiation. But that user may not possess the knowledge or skills to identify where the interference is coming from or whom to contact.

It has long been my understanding that one of the FCC's responsibilities is to ensure that current and future technologies integrate well within the spectrum they are allocated to use by the FCC. If this is the case, the Commission may be falling short in this NRPM.

As noted in the NRPM, Amateur Radio operators today routinely have problems with power line noise. But the FCC's statement, "[we] would expect that, in practice, many amateurs already orient their antennas to minimize the reception of emissions from nearby electric power lines" is true for only those cases where the Amateur licensee is not aware how to report and resolve the issue with the local power company.

It should also be noted that many antennas are often NOT rotatable and as such, can't be oriented necessarily away from power line sources of interference. Additionally, it would make no sense to require an Amateur licensee to reorient an antenna not aligned with the location where transmissions and reception are desired. That would be counter productive; eliminating the source of interference is the proper and required solution under the Commissions rules.

In many cases power companies are unwilling or unavailable to work with Amateur licensees in resolving power line interference complaints. In fact, the FCC's Consumer Information Network Division and Enforcement Bureau routinely have to mitigate on behalf of Amateur licensees who are unable to resolve harmful interference issues under Title 47, CFR sections 15.5, 15.13 and 15.15.

The process of resolving interference issues with power utilities today is often slow and extremely frustrating. Based on these experiences one can only assume that attempting to resolve future BPL issues would be equally as difficult. Standards for answering and resolving BPL interference complaints must be an integral part of any regulations governing the same. Cable operators have state and federal guidelines for handling subscriber and consumer issues - but there appears to be no similar provisions for BPL.

In BPL trials it appears that the utilities are taking efforts to minimize BPL's impact to Amateur frequencies. But often Amateur operators are also receiving on frequencies outside their amateur allocations. Examples include the reception of standard time and frequency stations such as WWV and CHU, facsimile from other HF services, etc.

Amateur operators have also often been involved with other out-of-band operations including HF ship-to-shore, MARS and other emergency communications efforts. The FCC's regulations must ensure that BPL operators not only minimize their impact on the Amateur allocations, but generally across the entire HF spectrum.

It should also be noted that many individuals who are devoted to Amateur radio activities actually invest in purchasing property in rural areas where they can erect elaborate antenna systems for continued communications and experimentation - all within the regulations of the Amateur Radio service. Being in a rural area ensures that Amateur operations have minimal impact on neighbors (RFI/TFI) that would otherwise be an issue in urban environments. Rural settings also afford low levels of interference that are otherwise prevalent in urban areas.

Based on current observations, implementation of BPL will likely cause increased interference to those Amateurs in rural areas who are today enjoying low interference levels. BPL deployment may become a negative criteria for where an Amateur licensee may consider purchasing property.

In closing, I must conclude that I am against the approval of modifications of the Commissions regulations as proposed in the NRPM to support BPL. In my opinion the proposed modifications to Part 15 do not provided enough protection for current users of the HF spectrum, especially those with primary allocations, from possible interference from devices that would be operating under Section 15.3 (ff).

I would like to thank Commissioner Martin for his recognition of the issue on "how to facilitate deployment of BPL while ensuring that existing users are protected against interference".
I hope that in receipt of comments for this NRPM that the Commission is able to better establish guidelines and procedures that will ensure the protection of the HF spectrum.